

Historic Mining Areas: Health and Safety

Many historic mining areas in Idaho can have high levels of lead and other metals in waste rock, tailings piles, soil, sediment, and water. Metals can enter the human body in several ways (e.g., when recreating in contaminated soil, putting hands or other objects covered with dust into the mouth, breathing in contaminated dust). Soil and dust from these areas can be unknowingly tracked into vehicles or homes after recreating in areas impacted by past mining activities. When possible, stay away from these potential hazards.

Actions you can take to reduce exposure to metals when recreating and visiting historic mining areas

- Keep hands clean, especially after playing outside and before eating, to keep dirt away from mouths.
 - Wash hands with soap and water, but not creek or river water. Bring water for cleaning.
 - Scrub for at least 20 seconds to remove particles. Use a nail scrub brush to get dirt out of fingernails.
 - Hand sanitizer kills germs but will not remove lead and other metals.
- Have a table or clean barrier (e.g., towel, blanket) between food and the ground. Do not eat food that has been dropped on the ground.
- Do not let children play in loose soil, dust, or muddy areas. Wash children's toys after playing outside.
- When riding ATVs, motorcycles, and bikes off-road, wear protective gear including a
 mask or other face covering. Avoid riding through dusty areas and increase distance
 between riders. When returning home, avoid tracking dust into the garage by washing
 vehicles.
- Do not camp or recreate near old mining structures or mining waste piles.
- Leave shoes outside the camper or tent.
- For homes and cabins in historic mining areas, regularly damp-wipe floors and surfaces indoors and vacuum carpets.
- Dust off or wash off anything that will be brought home.
 - Until they are clean, store dusty recreational clothes, shoes, toys, and equipment separate from clean areas. Wash dusty clothes separately from other laundry.
 - Wash pets that have played in the dirt or the river before letting them into the home
 - Wash or dust off any camping or recreational items (e.g., tents, bicycles).

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Lead and other metals

There is no safe level of lead exposure. Lead is most dangerous to young children, pregnant women, and unborn children. It can cause learning disabilities, behavioral problems, and slow growth. Lead can pose a risk to adults by causing memory loss, irritability, high blood pressure, and muscle or joint pain. Even small amounts of lead, less than a quarter teaspoon of contaminated dust or soil, can harm a child. Young children crawling and putting hands in their mouths have the most risk.

Besides visiting historic mine sites, other potential sources of lead in your home can include: lead paint in homes built before 1978 (www.epa.gov/lead/protect-your-family-exposures-lead) and some toys and ceramics may contain lead. Make sure children have plenty of calcium, iron, and vitamin C in their diets. Taking in these essential nutrients can help reduce the amount of lead the body absorbs. For more factsheets on hazardous substances, see the Agency for Toxic Substances and Disease Registry (ATSDR) ToxFAQs: www.atsdr.cdc.gov/toxfaqs.

Stay out and stay alive

Every year dozens of people are injured or killed in recreational accidents on mine property. Hazards associated with abandoned mines are not always apparent to recreationalists. STAY OUT AND STAY ALIVE. For more information visit: www.abandonedmines.gov

Common hazards associated with mines:

- Open shafts are vertical mine openings that can extend hundreds of feet to the lower level of a mine. Open shafts can be concealed by mine debris, dirt, rock, and water.
- Unstable and decayed support includes once solid beams and frameworks that have been decaying for more than a hundred years. In many cases, there may be no support at all and the fractured roof or walls of the mine tunnel may eventually collapse in response to vibrations and/or the force of gravity.
- **Deadly gases and lack of oxygen** can be present in abandoned mines that are not ventilated. Pockets of methane, carbon dioxide, and other deadly gases can form and displace oxygen with no visible sign. Breathing in these gases can cause muscles to stop responding normally, impaired thinking, and even unconsciousness and death.
- Horizontal and vertical openings can extend for miles. Within a short distance of the entrance there is no light, making it easy to become lost and disoriented inside a mine.

For more information

For more information on historical mining sites and your family's health, contact the Idaho Department of Health and Welfare at 1-800-445-8647 or https://healthandwelfare.idaho.gov/health-wellness/environmental-health

For other questions about historic mining areas, contact the nearest DEQ regional office:

• Boise: (208) 373-0550

• Coeur d'Alene: (208) 769-1422

• Idaho Falls: (208) 528-2650

• State Office: (208) 373-0502

• Lewiston: (208) 799-4370

• Pocatello: (208) 236-6160

Twin Falls: (208) 736-2190

November 2020 2